

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent, and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virgin a 22312,1450

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DATE MAILED: 11/26/2003

NOTICE OF ALLOWANCE AND FEE(S) DUE

26646

7590

11/26/2003

KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004 EXAMINER

YAMNITZKY, MARIE ROSE

ART UNIT PAPER NUMBER

1774

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,455	10/16/2001	Sergey Lamansky	10020/20702	5124

TITLE OF INVENTION: ORGANOMETALLIC COMPOUNDS AND EMISSION-SHIFTING ORGANIC ELECTROPHOSPHORESCENCE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	02/26/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (703) 746-4000

INSTRUCTIONS: This for appropriate. All further cor indicated unless corrected to maintenance fee notification	m should be used for trans respondence including the F below or directed otherwise is.	mitting the ISSUE FE Patent, advance orders a in Block 1, by (a) spec	EE and PUBLIC, and notification of cifying a new co	ATION FEE (if red of maintenance fees rrespondence addre	quired). Blocks 1 through 4 s will be mailed to the current ss; and/or (b) indicating a sep-	should be completed where correspondence address as arate "FEE ADDRESS" for
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26646 7590 11/26/2003 KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004			papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelop addressed to the Mail Stop ISSUE FEE address above, or being facsimilitransmitted to the USPTO, on the date indicated below.			
. '						(Depositor's name)
						(Signature)
						(Date)
APPLICATION NO.	FILING DATE	FIRST	T NAMED INVEN	OR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,455	10/16/2001	S	Sergey Lamansky		10020/20702	5124
APPLN. TYPE	RGANOMETALLIC COMI	ISSUE FEE		BLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
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	MARIE ROSE e address or indication of "Fe			the patent front pag		
Address form PTO/SB/1: "Fee Address" indicati PTO/SB/47; Rev 03-02 (Number is required.	ence address (or Change of C 22) attached. on (or "Fee Address" Indicator more recent) attached. Use D RESIDENCE DATA TO B	ion form e of a Customer	rm (having as a gent) and the nai torneys or agent ill be printed.	tively, (2) the nammember a registere nes of up to 2 reg s. If no name is lis	d attorney or 2istered patent	
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4a. The following fee(s) are	enclosed:	•	/ment of Fee(s):	ount of the fee(s) is	enclosed	
☐ Issue Fee☐ Publication Fee				card. Form PTO-20		
☐ Advance Order - # of Copies ☐ The Director is h			The Director is he	reby authorized by	charge the required fee(s), or	
Director for Patents is reque	sted to apply the Issue Fee a		ny) or to re-apply		(enclose an extra dissue fee to the application ide	
(Authorized Signature)		(Date)				
other than the applicant; interest as shown by the re	d Publication Fee (if requir a registered attorney or ag cords of the United States Pa	ent; or the assignee or itent and Trademark Of	fice.			•
This collection of information obtain or retain a benefit application. Confidentialli estimated to take 12 minu completed application for case. Any comments on suggestions for reducing Patent and Trademark 22313-1450. DO NOT SEND TO: Commissioner	ation is required by 37 CFR by the public which is to fy is governed by 35 U.S.C. I test to complete, including generated the unit of the USPTO. Time with amount of time you this burden, should be sent Office, U.S. Department SEND FEES OR COMPLET for Patents, Alexandria, Vir	1.311. The informatio ile (and by the USPTO 22 and 37 CFR 1.14. The athering, preparing, and Il vary depending upor require to complete the Chief Informatio of Commerce, Alexa TED FORMS TO TH ginia 22313-1450.	on is required to to to process) and this collection is disubmitting the name of the individual is form and/or on Officer, U.S. andria, Virginia IIS ADDRESS.			

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APPLICATION NO). F	FILING DATE FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,455	978,455 10/16/2001		Sergey Lamansky	10020/20702	5124
26646	7590	11/26/2003		EXAMI	NER
KENYON &		I		YAMNITZKY,	MARIE ROSE
ONE BROAD NEW YORK,				ART UNIT	PAPER NUMBER
,				1774	
				DATE MAILED: 11/26/2003	.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 80 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 80 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



United States Patent and Trademark Office

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KENYON &	KENYON	Ī		YAMNITZKY,	MARIE ROSE
ONE BROAD\ NEW YORK, I				ART UNIT	PAPER NUMBER
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DATE MAILED: 11/26/2003

Notice of Fee Increase on October 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on October 1, 2003. See Revision of Patent Fees for Fiscal Year 2004; Final Rule, 68 Fed. Reg. 41532, 41533, 41534 (July 14, 2003).

The current fee schedule is accessible from (http://www.uspto.gov/main/howtofees.htm).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in view of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowance is to be filed on or after October 1, 2003 (or mailed with a certificate of mailing on or after October 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously-paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Effective October 1, 2003, 37 CFR 1.18 is amended by revising paragraphs (a) through (c) to read as set forth below.

Section 1.18 Patent post allowance (including issue) fees.

(a) Issue fee for issuing each original or reissue patent, except a design or plant patent:

(b) Issue fee for issuing a design patent:

(c) Issue fee for issuing a plant patent:

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

CL 916

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Notice of Allowahility	09/978,455						
Notice of Allowability	Examin r	Art Unit					
	Marie R. Yamnitzky	1774					
Th MAILING DATE of this communication appears on th cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.							
1 M This communication is recoverable to Applicants' emendment	ent received 12 November 2002 (Ban	or No. 14)					
1. This communication is responsive to <u>Applicants' amendments</u>		<u>er 110. 14)</u> .					
 2. The allowed claim(s) is/are 31, 33-36, 38-51 and 37 (renur. 3. The drawings filed on are accepted by the Examine. 							
The drawings filed on are accepted by the Examiner Acknowledgment is made of a claim for foreign priority ur		•	•				
a) All b) Some* c) None of the:							
 Certified copies of the priority documents have 							
Certified copies of the priority documents have	been received in Application No	 ·					
Copies of the certified copies of the priority do	cuments have been received in this r	national stage applica	tion from the				
International Bureau (PCT Rule 17.2(a)).		•					
* Certified copies not received:							
5. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.							
$\underline{\hspace{0.1in}}$ (a) \square The translation of the foreign language provisional a	pplication has been received.						
6. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.							
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of							
7. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			OTICE OF				
8. ☑ CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) ☑ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached							
1) ⊠ hereto or 2) ☐ to Paper No. .							
(b) including changes required by the proposed drawing correction filed, which has been approved by the Examiner.							
(c) ☑ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No							
Identifying indicia such as the application number (see 37 CFR 1			back) of				
each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).							
9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.							
Attachm nt(s)							
1☐ Notice of References Cited (PTO-892)	5⊡ Notice of Informal Pat	ent Application (PTO-	-152)				
2⊠ Notice of Draftperson's Patent Drawing Review (PTO-948)	6⊠ Interview Summary (PTO-413), Paper No.15						
3 Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No	• ,		_				
4 Examiner's Comment Regarding Requirement for Deposit of Biological Material	8∏ Examiner's Statemen 9∏ Other	t of Reasons for Allow	/ance				

Application/Control Number: 09/978,455

Art Unit: 1774

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kevin Godlewski and Christopher Glynn on November 24, 2003.

The application has been amended as follows:

Claim 31, penultimate line: "X = S or O; and" has been deleted.

Claim 31, last line: the comma after " R_3 " has been deleted; "and R_5 " has been deleted; --and-- has been inserted after " R_3 ".

Claim 47, line 2: "organometalliccompound" has been changed to --organometallic compound--.

(Currently Amended) The An organic light emitting device of claim 31 having an emissive layer comprising an organometallic compound, wherein the organometallic compound has the chemical structure represented by a formula selected from the group consisting of

C'ant'd

C

F N N N O C

and

 \mathcal{C}

The following changes to the drawings have been approved by the examiner and agreed upon by applicant:

In Fig. 6b (Replacement Sheet filed November 12, 2003), " $X = CH_2$, NH" needs to be changed to --X = CH, N--.

In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes, in addition to the changes required by the accompanying PTO-948.

The amendment received November 12, 2003 (Paper No. 14) has been entered, including the replacement sheets for Figures 5d, 6a, 6b, 6c and 8d.

The examiner's amendment to claim 31 deletes references to variables not contained in the formulae remaining in amended claim 31 as set forth in Paper No. 14.

The amendment to claim 47 corrects a typographical error introduced in Paper No. 14.

Claim 37 is rewritten as an independent claim because none of the compounds represented by the formulae set forth in claim 37 as amended in Paper No. 14 are within the scope of the compound required by claim 31 as amended in Paper No. 14.

With respect to the issues raised in the final rejection:

The rejection under 35 U.S.C. 112, first paragraph, is overcome in part by applicants' amendment and withdrawn in part in consideration of applicants' arguments in Paper No. 14.

Application/Control Number: 09/978,455

Art Unit: 1774

The rejection under 35 U.S.C. 112, second paragraph, is overcome in part by applicants' amendment. The question raised regarding the definition of E is withdrawn in consideration of applicants' arguments in Paper No. 14.

Each of the rejections based on the published applications of Thompson et al., Igarashi et al., and Grushin et al. is overcome by applicants' amendment of the claims in Paper No. 14.

The obviousness-type double patenting rejection based on copending application 09/637,766 is overcome by applicants' amendment of the claims in Paper No. 14.

The obviousness-type double patenting rejection based on copending application 09/981,496 is overcome by applicants' amendment of the '496 application.

The obviousness-type double patenting rejection based on copending application 10/171,235 is withdrawn pursuant to MPEP 822.01.

With respect to the definition of R₁-R₄ in claim 31 and the definition of R₁-R₅ in claim 51, the examiner notes that at least one of these R variables per compound must be other than hydrogen in order to meet the requirement for at least one mono-anionic, bidentate, carbon-coordination ligand having at least one electron donating or electron withdrawing substituent.

Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (703) 308-4413. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax number for Art Unit 1774 is (703) 872-9306 for all official faxes. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (703) 872-9041.)

MRY

November 25, 2003

MARIE YAMNITZKY PRIMARY EXAMINER

Marie R. Yamintzky

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